Nooksack River Watershed - WRIA 1

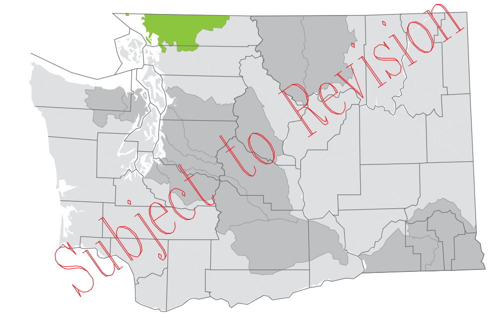
Inadequate streams flows have been identified as a limiting factor to salmonid productivity in several lowland tributaries of the main stem, South Fork, and North Fork of the Nooksack Watershed. Water is diverted primarily for agricultural purposes, but conversion of these lands for residential and commercial land use is accelerating. More than 30 streams and reaches have been closed to further water appropriations by rule. In addition, independent drainages such as Chuckanut, Dakota, and California Creeks have numerous surface water rights and have been closed to further appropriation. Most of these streams also suffer from water quality and temperature problems associated with poor riparian and floodplain conditions associated with agriculture and development.

Primary surface water users include power producers, commercial, industrial, and municipal/ domestic users, with agricultural use identified as being ranked relatively low overall. Groundwater is the primary source of water used for agriculture in this watershed. Groundwater withdrawal from shallow aquifers during the later summer months is thought to be a contributing factor to low flows. Stream channelization and the ditching of wetlands are thought to have significant impacts to aquifer storage and summer flows. However, surface water withdrawals are most significant in areas with intensive agriculture such as Dakota, California, and Chuckanut Creeks and some of the tributaries of lower Nooksack. It is here that water rights acquisition activities should be focused.

The South Fork Nooksack River is identified on the 303(d) list as having critical low surface flows and excessive temperatures during the summer months. Low flow limits pool habitat for rearing salmonids. There are numerous surface water rights in the lower South Fork which should be investigated for acquisition.

While groundwater withdrawals, hydrology alterations from land uses including impervious surfaces and logging,, and municipal and industrial withdrawals stream all contribute to low flows, flow restoration should be focused on acquisition of surface water rights in the smaller independent tributaries and tributaries of lower Nooksack. It is not expected that sufficient water could be acquired with the available budget to effect measurable change in mainstem flows.

Stream Flow Prioritization: Nooksack WRIA 1



Stream Flow Prioritization: Nooksack WRIA 1

- US Forest Service
- US Wildlife Refuge
- US Parks/Recreation
- USFS Wilderness Area
- Bureau of Land Management
- US Dept. Defense/Energy
- Wa. Dept. of Fish & Wildlife
- Wa. Dept. of Naural Reasources
- State School/Hospital/Prison
- Wa. Parks & Recreation
- City/County Watershed/Park
- Tribal Lands
- Incorporated City

- Low priority stream
- Medium priority stream
- High priority stream
- Salmon/Bull Trout Spawning/Rearing area
- Other streams
- Canal/ditch/pipe
- USGS Stream Flow Gage
- Ecology Stream Flow Gage
- Water Right Purchase

- County
- Highways
- Secondary Roads

WDNR/Ecology - Major Public Lands 2002 100k
WDFW/Ecology - Hydrography, 2000 100k
Ecology - WRIA, 2002 24K
WDOT - Transportation, 2001 24K
WDFW - Stream Flow Prioritization 2002
WDFW - Spawning/Rearing Areas 2002 100k
USGS/Ecology - Stream Gages 1:100k

Miles
0 3.5 7

Water Resources Program

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